CLAIMS

1. Object imaging method by multiple acquisition, comprising an estimation of a scattered radiation from an initial radiation that has passed through an object (3) while undergoing an attenuation that allows a total measurement radiation to pass through, characterised by:

- for at least one acquisition, taking a table of measurements of a scattered radiation, obtained by passing the initial radiation through an imitation (8) of the object,

- and for each of the acquisitions, calculating transposition coefficients (K') between the imitation and the object, from the initial radiation (Φo), the total measurement radiation through the object (Φt object) and a total measurement radiation through the imitation (Φt imitation).

- and weighting of the table of measurements with transposition coefficients.

2. Imaging method according to claim 1, characterised in that the imitation (8) is a block of constant thickness and in a homogeneous material, with an attenuation similar to a base material of the object.

3. Imaging method according to claim 1, characterised in that the taking of the measurement table is a selection in a series of scattered diffusion measurement tables, obtained by successively passing the initial radiation through a respective series of imitations of the object, which are blocks of different

but constant thickness and in a homogeneous material, having an attenuation similar to a base material of the object.

4. Imaging method according to claim 3, characterised in that the selection comprises an interpolation between two tables of measurements.

5. Imaging method according to either of claims 3 or 4, characterised in that the selection is carried out by comparing a value of the total measurement radiation through the object and a value of the total measurement radiation through the imitations.

6. Imaging method according to claim 5, characterised in that the comparison is carried out for identical rays (13) of the initial radiation through the object and the imitations, only going through the base material of the object.

7. Imaging method according to any of claims 1 to 6, characterised in that the weighting coefficients are identical functional ratios calculated for the object and the imitation.

8. Imaging method according to claim 7, characterised in that the functionals are equal to the product of the total measurement radiation times the logarithm of the ratio of the total measurement radiation and the initial radiation.

9. Imaging method according to any of claims 1 to 8, characterised in that it comprises a step of low pass filtering of the transposition coefficients, arranged in a table superposable on the table of measurements.

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10. Method comprising a step of correcting radiography measurements by subtracting the scattered radiation estimated according to the method according to any of the preceding claims.

5   11. Application of the method according to any of the preceding claims to tomography.

12. Application of the method according to any of claims 1 to 11 to bone densitometry.

13. Application of the method according to any of
10   claims 1 to 11 to non-destructive controls.